Instructions and Definitions for Chemical (IOCs, SOCs, VOCs, and NOX) and Radionuclide Laboratory Results

Results and Form Submission

WQCD – Drinking Water CAS
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For Schedules, Additional Information, and Guidance Please Visit: http://www.colorado.gov/cdphe/wqcompliance

General Tips

- Collect all Chemical and Radionuclide Routine Samples at the Entry Point(s) to the Distribution System.
  - Provide Both the Facility ID (for example: 004) and Sample Point ID (for example: 004). These will often match.
- DO NOT collect Chemical and Radionuclide Routine Samples in the Distribution System or at the Source
- DO NOT collect samples from hoses or through screens

Abbreviations/Acronyms

- NT: Not Tested
- N/A: Not Applicable
- mg/L: Milligrams per Liter
- ug/L: Micrograms per Liter
- pCi/L: Picocuries per Liter
- MCL: Maximum Contaminant Level
- Lab MDL: Laboratory Method Detection Limit
- BDL: Below Laboratory MDL. A less than sign (<) may also used
- B: The analyte is found in the associated blank as well as in the sample
- H: Holding time has been exceeded
- CAS No: Chemical Abstract Service Registry Number
- IOCs: Inorganic Chemicals Group
- SOCs: Synthetic Organic Chemicals Group
- VOCs: Volatile Organic Chemicals Group
- NOX: Nitrate and Nitrite

Chemical and Radionuclide Laboratory Results

Sections Completed by the Public Water System

1. PWSID: Enter the Public Water System (PWS) Identification assigned by the Colorado Department of Public Health and Environment (CDPHE). This may be found on your monitoring schedule
2. System Name: Enter system legal name provided to CDPHE when PWSID assigned
3. Contact Person: The person at the PWS able to answer questions about these samples
4. Phone #: The phone number of the contact person
5. Comments: Any comments to be included with the form
6. Sample Date: The date the samples were collected
7. Collector: The person who collected the samples
8. Facility ID: Enter the Facility Identification assigned by CDPHE. This may be found on your monitoring schedule and is typically a number (for example: 007)
9. Sample Point ID: Enter the Sample Point Identification assigned by CDPHE. This may be found on your monitoring schedule and is typically a number (for example: 007)
10. Confirmation Sample (Nitrate or Nitrite Only): If this is a confirmation sample please check the box. For Nitrate or Nitrite, a confirmation sample must be taken when a Routine Sample exceeds the MCL. If a confirmation is taken for an analyte other than Nitrate or Nitrite then please make a note in the Comments section.

Sections Completed by the Certified Laboratory

1. Laboratory ID: Enter the Laboratory Identification assigned by CDPHE. A "List of Drinking Water Laboratory Names and IDs" file is located at http://www.colorado.gov/cdphe/wqcompliance under 'Laboratory Services Division'
2. Laboratory Name: Enter laboratory legal name provided to CDPHE
3. Contact Person: The person at the lab able to answer questions about these samples
4. Phone #: The phone number of the contact person
5. Comments: Any comments to be included with the form
6. Authorized Signature: The person signing the form must be an authorized laboratory representative. Include printed name, title, and date signed
7. Lab Receipt Date and Lab Analysis Date: The date the samples were received and analyzed
8. Lab Sample ID: The laboratory unique sample identification for the PWS sample
9. Analytical Method: The method used in the analysis

Chemical and Radionuclide Laboratory Results

Composite Samples for IOCs, SOCs, and VOCs

1. The regulations allow the **LABORATORY** only, at your request, to composite more than one source, into one sample. You must indicate that you want the laboratory to composite the samples. This will reduce the overall cost of the monitoring, but the laboratory may add some additional fees to cover the costs of the additional sample bottle preparation and the compositing procedure.
2. If compositing, please describe all sampling points (including state assigned ID numbers) being composited. If more than one system/establishment is compositing, include PWS ID for each system. Systems with a population **greater than 3,300 may NOT** composite with another system.
3. Up to FIVE (5) samples can be composited for Chemical Contaminants. The laboratory must meet the required detection levels of 1/5th the MCL.
4. Check or Confirmation samples CANNOT be composited!
5. If a contaminant is detected in a composited sample, you may be required to resample. If you are required to resample, each entry point must be sampled and analyzed separately.

Composite Samples for Radionuclides

1. The regulations allow the **LABORATORY** only, at your request, to composite more than one quarter, into one sample. You must indicate that you want the laboratory to composite the samples. This will reduce the overall cost of the monitoring, but the laboratory may add some additional fees to cover the costs of the additional sample bottle preparation and the compositing procedure.
2. To fulfill quarterly monitoring requirements for gross alpha particle activity, radium-226, radium-228, or uranium, a system may composite up to four consecutive quarterly samples from a single entry point if analysis is done within a year of the first sample. The Department will treat analytical results from the composited as the average analytical result to determine compliance with the MCLs and the future monitoring frequency. If the analytical result from the composited sample is greater than 1/2 MCL, the Department may direct the system to take additional quarterly samples before allowing the system to sample under a reduced monitoring schedule.

Composite Samples Not Allowed for Nitrate or Nitrite